WHAT IS CLAIMED IS:

1. A composition for dry cow udder protection, comprising:

a bimodal interpenetrating polymer system having both cationic and anionic functionalities and capable of forming a stable aqueous solution and ionic bonds between polar chains.

2. The composition for dry cow udder protection according to Claim 1, wherein said bimodal interpenetrating polymer system is comprised of Polyacrylate-18 and Polyacrylate-19.

3. The composition for dry cow udder protection according to Claim 1, wherein said bimodal interpenetrating polymer system is approximately 20% to approximately 40%, by weight, of an aqueous solution.

4. The composition for dry cow udder protection according to Claim 1, wherein said bimodal interpenetrating polymer system is in an aqueous solution having a thixotropic viscosity of from approximately 500 cps to approximately 5,000 cps, as measured with a Brookfield Viscometer at 20 rpm with a # 3 spindle.

5. The composition for dry cow udder protection according to Claim 4, wherein said aqueous solution includes a dermatologically-compatible solvent for enhancing rapidity of evaporation of said aqueous solution on a cow teat.

6. The composition for dry cow udder protection according to Claim 5, wherein said dermatologically-compatible solvent is non-cytotoxic and non-irritating to mammalian skin.

7. The composition for dry cow udder protection according to Claim 5, wherein said dermatologically-compatible solvent is a member selected from the group consisting of ethanol, isopropanol, ethyl lactate, diacetone alcohol, N-methyl pyrrolidone, a monoethylene glycol ether, a diethylene glycol ether and a combination thereof.

8. The composition for dry cow udder protection according to Claim 4, wherein said aqueous solution includes an antimicrobial agent.

9. The composition for dry cow udder protection according to Claim 8, wherein said antimicrobial agent is a member selected from the group consisting of iodine, chlorhexidine, sodium dodecylbenzene sulfonate, nitrous acid, bronopol, triclosan and a combination thereof.

10. A method for dry cow udder protection, comprising the step(s) of:

applying an aqueous solution containing a bimodal interpenetrating polymer system to a cow teat.

11. The method for dry cow udder protection according to Claim 10, wherein said bimodal interpenetrating polymer system includes Polyacrylate-18 and Polyacrylate-19.

12. The method for dry cow udder protection according to Claim 10, wherein said bimodal interpenetrating polymer system comprises approximately 20% to 40%, by weight of said aqueous solution.

13. The method for dry cow udder protection according to Claim 10, further comprising the step of:

adjusting viscosity of said aqueous solution for allowing an adequate amount of said bimodal interpenetrating polymer system to deposit, dry to a film, and remain on the cow teat.

14. The method for dry cow udder protection according to Claim 13, wherein said viscosity of said aqueous solution has a thixotropic viscosity of from approximately 500 cps to approximately 5,000 cps, as measured with a Brookfield Viscometer at 20 rpm with a # 3 spindle.

15. The method for dry cow udder protection according to Claim 13, wherein said step of adjusting viscosity of said aqueous solution is carried out by adjusting pH of said aqueous solution.

16. The method for dry cow udder protection according to Claim 15, wherein pH is adjusted with a member selected from the group consisting of an ammonium salt, an ethanolamine family composition, an alkali earth hydroxide composition, an alkaline earth hydroxide composition and a combination thereof.

17. The method for dry cow udder protection according to Claim 15, wherein pH is adjusted with a member selected from the group consisting of sodium hydroxide, calcium hydroxide and a combination thereof.

18. The method for dry cow udder protection according to Claim 13, wherein said step of adjusting viscosity of said aqueous solution is carried out by adding a thickening agent to said aqueous solution.

19. The method for dry cow udder protection according to Claim 18, wherein said thickening agent is selected from the group consisting of a cellulosic

composition, a Carbopol composition, a hydrated silica composition and a combination thereof.

20. The method for dry cow udder protection according to Claim 18, wherein said thickening agent is a natural or synthetic thickening agent selected from the group consisting of a xanthan gum, a polyacrylamide, a salt of a polyacrylamide and a combination thereof.